SEQUENCE LISTING

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<110> Pramod K. Srivastava
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<120> ALPHA(2) MACROGLOBULIN RECEPTOR AS A HEAT SHOCK PROTEIN RECEPTOR AND USES THEREOF

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<150> 60/209,095

<151> 2000-06-02

<160> 57

<170> FastSEQ for Windows Version 3.0

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<212> DNA

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 Val
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 Leu
 Leu
 Val
 Pro
 Leu
 Leu</th

Leu Gly Thr Glu Leu Cys Val Pro Met Ser Arg Leu Cys Asn Gly Ile Gln Asp Cys Met Asp Gly Ser Asp Glu Gly Ala His Cys Arg Glu Leu 100 105 Arg Ala Asn Cys Ser Arg Met Gly Cys Gln His His Cys Val Pro Thr 120 Pro Ser Gly Pro Thr Cys Tyr Cys Asn Ser Ser Phe Gln Leu Glu Ala 135 140 Asp Gly Lys Thr Cys Lys Asp Phe Asp Glu Cys Ser Val Tyr Gly Thr 150 155 Cys Ser Gln Leu Cys Thr Asn Thr Asp Gly Ser Phe Thr Cys Gly Cys 165 170 175 Val Glu Gly Tyr Leu Leu Gln Pro Asp Asn Arg Ser Cys Lys Ala Lys 180 185 Asn Glu Pro Val Asp Arg Pro Pro Val Leu Leu Ile Ala Asn Ser Gln 200 Asn Ile Leu Ala Thr Tyr Leu Ser Gly Ala Gln Val Ser Thr Ile Thr 215 220 Pro Thr Ser Thr Arg Gln Thr Thr Ala Met Asp Phe Ser Tyr Ala Asn 230 235 Glu Thr Val Cys Trp Val His Val Gly Asp Ser Ala Ala Gln Thr Gln 250 245 Leu Lys Cys Ala Arg Met Pro Gly Leu Lys Gly Phe Val Asp Glu His 260 265 270 Thr Ile Asn Ile Ser Leu Ser Leu His His Val Glu Gln Met Ala Ile 280 285 Asp Trp Leu Thr Gly Asn Phe Tyr Phe Val Asp Asp Ile Asp Asp Arg 295 300 . Ile Phe Val Cys Asn Arg Asn Gly Asp Thr Cys Val Thr Leu Leu Asp 315 Leu Glu Leu Tyr Asn Pro Lys Gly Ile Ala Leu Asp Pro Ala Met Gly 325 330 Lys Val Phe Phe Thr Asp Tyr Gly Gln Ile Pro Lys Val Glu Arg Cys 340 345 Asp Met Asp Gly Gln Asn Arg Thr Lys Leu Val Asp Ser Lys Ile Val 360 Phe Pro His Gly Ile Thr Leu Asp Leu Val Ser Arg Leu Val Tyr Trp 375 Ala Asp Ala Tyr Leu Asp Tyr Ile Glu Val Val Asp Tyr Glu Gly Lys 390 395 Gly Arg Gln Thr Ile Ile Gln Gly Ile Leu Ile Glu His Leu Tyr Gly 410 Leu Thr Val Phe Glu Asn Tyr Leu Tyr Ala Thr Asn Ser Asp Asn Ala 425 Asn Thr Gln Gln Lys Thr Ser Val Ile Arg Val Asn Arg Phe Asn Ser 440 Thr Glu Tyr Gln Val Val Thr Arg Val Asp Lys Gly Gly Ala Leu His 455 Ile Tyr His Gln Arg Arg Gln Pro Arg Val Arg Ser His Ala Cys Glu 470 475 Asn Asp Gln Tyr Gly Lys Pro Gly Gly Cys Ser Asp Ile Cys Leu Leu 490 Ala Asn Ser His Lys Ala Arg Thr Cys Arg Cys Arg Ser Gly Phe Ser 500 505 Leu Gly Ser Asp Gly Lys Ser Cys Lys Lys Pro Glu His Glu Leu Phe 520 525 Leu Val Tyr Gly Lys Gly Arg Pro Gly Ile Ile Arg Gly Met Asp Met

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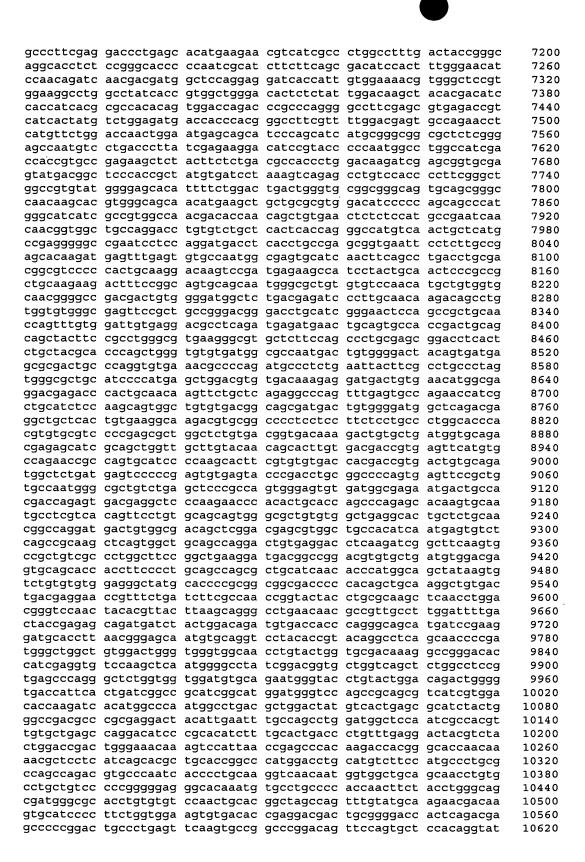
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etaggaageta ctacaceta taccacetec aaccecace 33	
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The second of the condition of the condi	
	J. J
atabatasaa corregadat cuacucucu gaggacomo	
	3 3
The second acade as a control of culture control of	
the state of the s	, , ,
	JJJJJ
and deduction of the second se	- 3
acatadaata coractitua uuualegagg egeggggggg	
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cgagaagcga gaacteetgg geeggggeee tgaggaegag ataggggaee ee	cttggcata 14100
^3~3~~3^3~ 3~~~~~~~~~~~~~~~~~~~~~~~~~~~	

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gggccctgcc ccgtcggact gccccagaa agcctcctgc cccctgccgg tgaagtcctt
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cagtgagece etececagee agecettece tggeceegee ggatgtataa atgtaaaaat
                                                                    14220
gaaggaatta cattttatat gtgagcgagc aagccggcaa gcgagcacag tattatttct
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                                                                    14340
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<210> 7 <211> 126 <212> PRT <213> Homo sapiens

<400> 7

Ile Ala Leu Asp Phe His Leu Ser Gln Ser Ala Leu Tyr Trp Thr Asp 1 5 10 Val Val Glu Asp Lys Ile Tyr Arg Gly Lys Leu Leu Asp Asn Gly Ala 25 Leu Thr Ser Phe Glu Val Val Ile Gln Tyr Gly Leu Ala Thr Pro Glu Gly Leu Ala Val Asp Trp Ile Ala Gly Asn Ile Tyr Trp Val Glu Ser 55 60 Asn Leu Asp Gln Ile Glu Val Ala Lys Leu Asp Gly Thr Leu Arg Thr 70 75 Thr Leu Leu Ala Gly Asp Ile Glu His Pro Arg Ala Ile Ala Leu Asp 85 90 Pro Arg Asp Gly Ile Leu Phe Trp Thr Asp Trp Asp Ala Ser Leu Pro 105 Arg Ile Glu Ala Ala Ser Met Ser Gly Ala Gly Arg Arg Thr 115 120

<210> 8 <211> 153 <212> PRT <213> Homo sapiens

<400> 8

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Thr Val Lys Met Leu Glu Arg Ser Asn His Val Ser Arg Thr Glu Val
           100
                              105
Ser Ser Asn His Val Leu Ile Tyr Leu Asp Lys Val Ser Asn Gln Thr
                          120
                                              125
Leu Ser Leu Phe Phe Thr Val Leu Gln Asp Val Pro Val Arg Asp Leu
                   135
                                         140
Lys Pro Ala Ile Val Lys Val Tyr Asp
                  150
     <210> 9
     <211> 138
     <212> PRT
     <213> Homo sapiens
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Met Lys Val Thr Gly Glu Gly Cys Val Tyr Leu Gln Thr Ser Leu Lys
1
                       10
Tyr Asn Ile Leu Pro Glu Lys Glu Glu Phe Pro Phe Ala Leu Gly Val
                               25
Gln Thr Leu Pro Gln Thr Cys Asp Glu Pro Lys Ala His Thr Ser Phe
                          40
Gln Ile Ser Leu Ser Val Ser Tyr Thr Gly Ser Arg Ser Ala Ser Asn
                      55
Met Ala Ile Val Asp Val Lys Met Val Ser Gly Phe Ile Pro Leu Lys
                                     75
Pro Thr Val Lys Met Leu Glu Arg Ser Asn His Val Ser Arg Thr Glu
                                  90
Val Ser Ser Asn His Val Leu Ile Tyr Leu Asp Lys Val Ser Asn Gln
          100
                              105
Thr Leu Ser Leu Phe Phe Thr Val Leu Gln Asp Val Pro Val Arg Asp
                120
Leu Lys Pro Ala Ile Val Lys Val Tyr Asp
                      135
     <210> 10
     <211> 27
     <212> PRT
     <213> Homo sapiens
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Ser Val Ser Tyr Thr Gly Ser Arg Ser Ala Ser Asn Met Ala Ile Val
                            10
Asp Val Lys Met Val Ser Gly Phe Ile Pro Leu
         20
     <210> 11
     <211> 126
     <212> PRT
     <213> Homo sapiens
     <400> 11
Leu Gln Gln Val Ser Leu Pro Glu Leu Pro Gly Glu Tyr Ser Met Lys
               5
                                  10
Val Thr Gly Glu Gly Cys Val Tyr Leu Gln Thr Ser Leu Lys Tyr Asn
                              25
                                                 3.0
Ile Leu Pro Glu Lys Glu Glu Phe Pro Phe Ala Leu Gly Val Gln Thr
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<210> 12 <211> 111 <212> PRT

<213> Homo sapiens

<400> 12 Leu Gln Gln Val Ser Leu Pro Glu Leu Pro Gly Glu Tyr Ser Met Lys 10 1 5 Val Thr Gly Glu Gly Cys Val Tyr Leu Gln Thr Ser Leu Lys Tyr Asn 25 Ile Leu Pro Glu Lys Glu Glu Phe Pro Phe Ala Leu Gly Val Gln Thr 40 Leu Pro Gln Thr Cys Asp Glu Pro Lys Ala His Thr Ser Phe Gln Ile 55 Ser Leu Ser Val Ser Tyr Thr Gly Ser Arg Ser Ala Ser Asn Met Ala 75 80 65 70 Ile Val Asp Val Lys Met Val Ser Gly Phe Ile Pro Leu Lys Pro Thr 85 90 Val Lys Met Leu Glu Arg Ser Asn His Val Ser Arg Thr Glu Val

<210> 13 <211> 81 <212> PRT <213> Homo sapiens

<213> HOMO Bapiens

<210> 14 <211> 101 <212> PRT <213> Homo sapiens

<400> 14

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Gln Thr Ser Leu Lys Tyr Asn Ile Leu Pro Glu Lys Glu Glu Phe Pro
                                   10
Phe Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys Asp Glu Pro Lys
           20
                               25
Ala His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser Tyr Thr Gly Ser
                           40
Arg Ser Ala Ser Asn Met Ala Ile Val Asp Val Lys Met Val Ser Gly
Phe Ile Pro Leu Lys Pro Thr Val Lys Met Leu Glu Arg Ser Asn His
                  70
                                       75
Val Ser Arg Thr Glu Val Ser Ser Asn His Val Leu Ile Tyr Leu Asp
Lys Val Ser Asn Gln
           100
      <210> 15
     <211> 76
      <212> PRT
      <213> Homo sapiens
     <400> 15
Gln Thr Ser Leu Lys Tyr Asn Ile Leu Pro Glu Lys Glu Glu Phe Pro
            5
Phe Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys Asp Glu Pro Lys
     20
                               25
Ala His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser Tyr Thr Gly Ser
                           40
                                            45
Arg Ser Ala Ser Asn Met Ala Ile Val Asp Val Lys Met Val Ser Gly
                      55
Phe Ile Pro Leu Lys Pro Thr Val Lys Met Leu Glu
                   70
     <210> 16
     <211> 56
      <212> PRT
     <213> Homo sapiens
     <400> 16
Gln Thr Ser Leu Lys Tyr Asn Ile Leu Pro Glu Lys Glu Glu Phe Pro
                                  10
Phe Ala Leu Gly Val Gln Thr Leu Pro Gln Thr Cys Asp Glu Pro Lys
                               25
Ala His Thr Ser Phe Gln Ile Ser Leu Ser Val Ser Tyr Thr Gly Ser
Arg Ser Ala Ser Asn Met Ala Ile
      <210> 17
      <211> 76
      <212> PRT
      <213> Homo sapiens
     <400> 17
Gln Thr Cys Asp Glu Pro Lys Ala His Thr Ser Phe Gln Ile Ser Leu
               5
                                   10
Ser Val Ser Tyr Thr Gly Ser Arg Ser Ala Ser Asn Met Ala Ile Val
           20
```

```
Asp Val Lys Met Val Ser Gly Phe Ile Pro Leu Lys Pro Thr Val Lys
Met Leu Glu Arg Ser Asn His Val Ser Arg Thr Glu Val Ser Ser Asn
                      55
His Val Leu Ile Tyr Leu Asp Lys Val Ser Asn Gln
                  70
     <210> 18
     <211> 76
     <212> PRT
     <213> Homo sapiens
     <400> 18
Gln Thr Cys Asp Glu Pro Lys Ala His Thr Ser Phe Gln Ile Ser Leu
                        10
Ser Val Ser Tyr Thr Gly Ser Arg Ser Ala Ser Asn Met Ala Ile Val
                              25
Asp Val Lys Met Val Ser Gly Phe Ile Pro Leu Lys Pro Thr Val Lys
                           40
Met Leu Glu Arg Ser Asn His Val Ser Arg Thr Glu Val Ser Ser Asn
                      55
His Val Leu Ile Tyr Leu Asp Lys Val Ser Asn Gln
     <210> 19
     <211> 31
     <212> PRT
     <213> Homo sapiens
     <400> 19
Gln Thr Cys Asp Glu Pro Lys Ala His Thr Ser Phe Gln Ile Ser Leu
                            10
Ser Val Ser Tyr Thr Gly Ser Arg Ser Ala Ser Asn Met Ala Ile
     20
     <210> 20
     <211> 44
     <212> PRT
     <213> Homo sapiens
     <400> 20
Lys Thr Cys Ser Pro Lys Gln Phe Ala Cys Arg Asp Gln Ile Thr Cys
                                 10
Ile Ser Lys Gly Trp Arg Cys Asp Gly Glu Arg Asp Cys Pro Asp Gly
                             25
Ser Asp Glu Ala Pro Glu Ile Cys Pro Gln Ser Lys
     <210> 21
     <211> 86
     <212> PRT
     <213> Homo sapiens
     <400> 21
Lys Thr Cys Ser Pro Lys Gln Phe Ala Cys Arg Asp Gln Ile Thr Cys
               5
                                 10
Ile Ser Lys Gly Trp Arg Cys Asp Gly Glu Arg Asp Cys Pro Asp Gly
           20
```

```
Ser Asp Glu Ala Pro Glu Ile Cys Pro Gln Ser Lys Ala Gln Arg Cys
Gln Pro Asn Glu His Asn Cys Leu Gly Thr Glu Leu Cys Val Pro Met
Ser Arg Leu Cys Asn Gly Val Gln Asp Cys Met Asp Gly Ser Asp Glu
Gly Pro His Cys Arg Glu
     <210> 22
      <211> 43
      <212> PRT
      <213> Homo sapiens
      <400> 22
Lys Ala Gln Arg Cys Gln Pro Asn Glu His Asn Cys Leu Gly Thr Glu
                5
                                    10
Leu Cys Val Pro Met Ser Arg Leu Cys Asn Gly Val Gln Asp Cys Met
                                25
Asp Gly Ser Asp Glu Gly Pro His Cys Arg Glu
       35
      <210> 23
      <211> 42
      <212> PRT
      <213> Homo sapiens
     <400> 23
Gln Cys Gln Pro Gly Glu Phe Ala Cys Ala Asn Ser Arg Cys Ile Gln
                                   10
1
Glu Arg Trp Lys Cys Asp Gly Asp Asn Asp Cys Leu Asp Asn Ser Asp
Glu Ala Pro Ala Leu Cys His Gln His Thr
       35
      <210> 24
      <211> 82
      <212> PRT
      <213> Homo sapiens
      <400> 24
Gln Cys Gln Pro Gly Glu Phe Ala Cys Ala Asn Ser Arg Cys Ile Gln
                                    10
Glu Arg Trp Lys Cys Asp Gly Asp Asn Asp Cys Leu Asp Asn Ser Asp
                                25
Glu Ala Pro Ala Leu Cys His Gln His Thr Cys Pro Ser Asp Arg Phe
                            40
Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn Arg Trp Leu Cys Asp Gly
                       55
Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu Ser Asn Ala Thr Cys Ser
65
                    70
                                        75
Ala Arg
```

```
<210> 25
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<211> 122

<212> PRT

<213> Homo sapiens

<210> 26 <211> 161 <212> PRT

<213> Homo sapiens

<400> 26 Gln Cys Gln Pro Gly Glu Phe Ala Cys Ala Asn Ser Arg Cys Ile Gln 10 Glu Arg Trp Lys Cys Asp Gly Asp Asn Asp Cys Leu Asp Asn Ser Asp Glu Ala Pro Ala Leu Cys His Gln His Thr Cys Pro Ser Asp Arg Phe 40 Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn Arg Trp Leu Cys Asp Gly 55 Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu Ser Asn Ala Thr Cys Ser 75 Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys 90 Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg 100 105 Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr 120 125 Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys 135 140 Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser Asp Glu Ala Gly Cys Ser 145 150 His

<210> 27 <211> 208 <212> PRT <213> Homo sapiens

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Glu Ala Pro Ala Leu Cys His Gln His Thr Cys Pro Ser Asp Arg Phe
Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn Arg Trp Leu Cys Asp Gly
Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu Ser Asn Ala Thr Cys Ser
                   70
Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys
               85
                                  90
Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg
                              105
Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr
                          120
Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys
                    135
                                 140
Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser Asp Glu Ala Gly Cys Ser
                   150
                                      155
His Ser Cys Ser Ser Thr Gln Phe Lys Cys Asn Ser Gly Arg Cys Ile
                                   170
Pro Glu His Trp Thr Cys Asp Gly Asp Asn Asp Cys Gly Asp Tyr Ser
           180
                               185
                                                   190
Asp Glu Thr His Ala Asn Cys Thr Asn Gln Ala Thr Arg Pro Pro Gly
                           200
     <210> 28
     <211> 150
      <212> PRT
     <213> Homo sapiens
     <400> 28
Gln Cys Gln Pro Gly Glu Phe Ala Cys Ala Asn Ser Arg Cys Ile Gln
                                   10
Glu Arg Trp Lys Cys Asp Gly Asp Asn Asp Cys Leu Asp Asn Ser Asp
Glu Ala Pro Ala Leu Cys His Gln His Thr Cys Pro Ser Asp Arg Phe
                           40
Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn Arg Trp Leu Cys Asp Gly
                       55
Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu Ser Asn Ala Thr Cys Ser
                   70
                                       75
Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys
               85
                                  90
Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp Asp Cys Gly Asp Arg
                               105
Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr
                           120
Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys
                      135
Asp Asn Asp Asn Asp Cys
145
                   150
     <210> 29
     <211> 231
     <212> PRT
     <213> Homo sapiens
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<400> 29

Gln Cys Gln Pro Gly Glu Phe Ala Cys Ala Asn Ser Arg Cys Ile Gln 1 5 10 15

```
Glu Arg Trp Lys Cys Asp Gly Asp Asn Asp Cys Leu Asp Asn Ser Asp
Glu Ala Pro Ala Leu Cys His Gln His Thr Cys Pro Ser Asp Arg Phe
                            40
Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn Arg Trp Leu Cys Asp Gly
Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu Ser Asn Ala Thr Cys Ser
                   70
                                       75
Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys
                                   90
Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg
                               105
Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr
       115
                           120
                                              125
Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys
                      135
                                         140
Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser Asp Glu Ala Gly Cys Ser
                   150
                                       155
His Ser Cys Ser Ser Thr Gln Phe Lys Cys Asn Ser Gly Arg Cys Ile
                                  170
Pro Glu His Trp Thr Cys Asp Gly Asp Asn Asp Cys Gly Asp Tyr Ser
           180
                               185
                                                   190
Asp Glu Thr His Ala Asn Cys Thr Asn Gln Ala Thr Arg Pro Pro Gly
                           200
                                               205
Gly Cys His Thr Asp Glu Phe Gln Cys Arg Leu Asp Gly Leu Cys Ile
                       215
Pro Leu Arg Trp Arg Cys Asp
225
                  230
     <210> 30
     <211> 40
     <212> PRT
     <213> Homo sapiens
     <400> 30
Cys Pro Ser Asp Arg Phe Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn
                                   10
Arg Trp Leu Cys Asp Gly Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu
         20
Ser Asn Ala Thr Cys Ser Ala Arg
     <210> 31
     <211> 80
     <212> PRT
     <213> Homo sapiens
      <400> 31
Cys Pro Ser Asp Arg Phe Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn
1
                . 5
Arg Trp Leu Cys Asp Gly Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu
         2.0
                               25
Ser Asn Ala Thr Cys Ser Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser
Cys Ala Ser Gly Arg Cys Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp
Asp Asp Cys Gly Asp Arg Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro
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<210> 32

<400> 34

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<211> 119
     <212> PRT
     <213> Homo sapiens
     <400> 32
Cys Pro Ser Asp Arg Phe Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn
Arg Trp Leu Cys Asp Gly Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu
Ser Asn Ala Thr Cys Ser Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser
                          40
Cys Ala Ser Gly Arg Cys Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp
                     55
Asp Asp Cys Gly Asp Arg Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro
                   70
                                   75
Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
                               90
Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
          100
                              105
Asp Glu Ala Gly Cys Ser His
       115
     <210> 33
     <211> 166
     <212> PRT
     <213> Homo sapiens
     <400> 33
Cys Pro Ser Asp Arg Phe Lys Cys Glu Asn Asn Arg Cys Ile Pro Asn
                                  10
Arg Trp Leu Cys Asp Gly Asp Asn Asp Cys Gly Asn Ser Glu Asp Glu
Ser Asn Ala Thr Cys Ser Ala Arg Thr Cys Pro Pro Asn Gln Phe Ser
Cys Ala Ser Gly Arg Cys Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp
                      55
Asp Asp Cys Gly Asp Arg Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro
Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
                    105
          100
Asp Glu Ala Gly Cys Ser His Ser Cys Ser Ser Thr Gln Phe Lys Cys
                          120
Asn Ser Gly Arg Cys Ile Pro Glu His Trp Thr Cys Asp Gly Asp Asn
                      135
                                          140
Asp Cys Gly Asp Tyr Ser Asp Glu Thr His Ala Asn Cys Thr Asn Gln
                  150
Ala Thr Arg Pro Pro Gly
           165
     <210> 34
     <211> 108
     <212> PRT
     <213> Homo sapiens
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 Cys
 Pro
 Ser
 Asp
 Arg
 Phe
 Lys
 Cys
 Glu
 Asn
 Asp
 Cys
 Ile
 Pro
 Asn

 1
 5
 10
 15

 Arg
 Trp
 Leu
 Cys
 Asp
 Gly
 Asp
 Asp
 Cys
 Gly
 Asp
 Gly
 Asp
 Gly
 Asp
 Gly
 Asp
 Gly
 Asp
 Arg
 Thr
 Cys
 Pro
 Pro
 Pro
 Asp
 Arg
 Pro
 Ile
 Pro
 Ile
 Ser
 Trp
 Thr
 Cys
 Asp
 Leu
 Asp
 Asp

<210> 35 <211> 289 <212> PRT

<213> Homo sapiens

Cys Ala Ser Gly Arg Cys Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp 50 55 60

Asp Asp Cys Gly Asp Arg Ser Asp Glu Ser Ala Ser Cys Ala Tyr Pro

65 70 75 80
Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile

85 90 95
Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
100 105 110

Asp Glu Ala Gly Cys Ser His Ser Cys Ser Ser Thr Gln Phe Lys Cys
115 120 125

Asn Ser Gly Arg Cys Ile Pro Glu His Trp Thr Cys Asp Gly Asp Asn 130 135 140

Asp Cys Gly Asp Tyr Ser Asp Glu Thr His Ala Asn Cys Thr Asn Gln 145 150 155 160

Ala Thr Arg Pro Pro Gly Gly Cys His Thr Asp Glu Phe Gln Cys Arg 165 170 175

Leu Asp Gly Leu Cys Ile Pro Leu Arg Trp Arg Cys Asp Gly Asp Thr 180 185 190

Asp Cys Met Asp Ser Ser Asp Glu Lys Ser Cys Glu Gly Val Thr His 195 200 205

Val Cys Asp Pro Ser Val Lys Phe Gly Cys Lys Asp Ser Ala Arg Cys 210 215 220

Ile Ser Lys Ala Trp Val Cys Asp Gly Asp Asn Asp Cys Glu Asp Asn 225 230 235

Ser Asp Glu Glu Asn Cys Glu Ser Leu Ala Cys Arg Pro Pro Ser His 245 250 255

Pro Cys Ala Asn Asn Thr Ser Val Cys Leu Pro Pro Asp Lys Leu Cys 260 265 270

Asp Gly Asn Asp Asp Cys Gly Asp Gly Ser Asp Glu Gly Glu Leu Cys 275 280 285

Asp

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<210> 36
     <211> 40
      <212> PRT
      <213> Homo sapiens
     <400> 36
Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys Ile Pro
             5
                                 10
Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg Ser Asp
                      25
Glu Ser Ala Ser Cys Ala Tyr Pro
       35
     <210> 37
     <211> 79
     <212> PRT
     <213> Homo sapiens
     <400> 37
Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys Ile Pro
Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg Ser Asp
     20
                              25
Glu Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr Gln Phe
                         40
Thr Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys Asp Asn
                      55
                                        60
Asp Asn Asp Cys Gly Asp Asn Ser Asp Glu Ala Gly Cys Ser His
                  70
     <210> 38
     <211> 126
     <212> PRT
     <213> Homo sapiens
     <400> 38
Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys Ile Pro
1 5
                    10
Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg Ser Asp
                              2.5
Glu Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr Gln Phe
                          40
Thr Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys Asp Asn
                      55
Asp Asn Asp Cys Gly Asp Asn Ser Asp Glu Ala Gly Cys Ser His Ser
                  70
                                     75
Cys Ser Ser Thr Gln Phe Lys Cys Asn Ser Gly Arg Cys Ile Pro Glu
                                 90
His Trp Thr Cys Asp Gly Asp Asn Asp Cys Gly Asp Tyr Ser Asp Glu
                             105
Thr His Ala Asn Cys Thr Asn Gln Ala Thr Arg Pro Pro Gly
                          120
     <210> 39
     <211> 68
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<212> PRT

<213> Homo sapiens

<400> 39 Thr Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys Ile Pro Ile Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg Ser Asp 20 Glu Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr Gln Phe 4.0 Thr Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys 65

<2.10> 40 <211> 248 <212> PRT

<213> Homo sapiens

<400> 40 Cys Pro Pro Asn Gln Phe Ser Cys Ala Ser Gly Arg Cys Ile Pro Ile 1 5 Ser Trp Thr Cys Asp Leu Asp Asp Asp Cys Gly Asp Arg Ser Asp Glu 20 25 Ser Ala Ser Cys Ala Tyr Pro Thr Cys Phe Pro Leu Thr Gln Phe Thr 40 Cys Asn Asn Gly Arg Cys Ile Asn Ile Asn Trp Arg Cys Asp Asn Asp 55 Asn Asp Cys Gly Asp Asn Ser Asp Glu Ala Gly Cys Ser His Ser Cys 70 75 Ser Ser Thr Gln Phe Lys Cys Asn Ser Gly Arg Cys Ile Pro Glu His 90 85 Trp Thr Cys Asp Gly Asp Asn Asp Cys Gly Asp Tyr Ser Asp Glu Thr 105 His Ala Asn Cys Thr Asn Gln Ala Thr Arg Pro Pro Gly Gly Cys His 120 Thr Asp Glu Phe Gln Cys Arg Leu Asp Gly Leu Cys Ile Pro Leu Arg 135 140 Trp Arg Cys Asp Gly Asp Thr Asp Cys Met Asp Ser Ser Asp Glu Lys 150 155 Ser Cys Glu Gly Val Thr His Val Cys Asp Pro Ser Val Lys Phe Gly 170 Cys Lys Asp Ser Ala Arg Cys Ile Ser Lys Ala Trp Val Cys Asp Gly 180 185 Asp Asn Asp Cys Glu Asp Asn Ser Asp Glu Glu Asn Cys Glu Ser Leu 195 200 205 Ala Cys Arg Pro Pro Ser His Pro Cys Ala Asn Asn Thr Ser Val Cys 215 Leu Pro Pro Asp Lys Leu Cys Asp Gly Asn Asp Asp Cys Gly Asp Gly 230 Ser Asp Glu Gly Glu Leu Cys Asp

<210> 41 <211> 39 <212> PRT <213> Homo sapiens

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<400> 41
Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
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Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
         20
Asp Glu Ala Gly Cys Ser His
      <210> 42
      <211> 86
      <212> PRT
      <213> Homo sapiens
      <400> 42
Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
1
Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
        20
                               25
Asp Glu Ala Gly Cys Ser His Ser Cys Ser Ser Thr Gln Phe Lys Cys
                           40
Asn Ser Gly Arg Cys Ile Pro Glu His Trp Thr Cys Asp Gly Asp Asn
                      55
                                        60
Asp Cys Gly Asp Tyr Ser Asp Glu Thr His Ala Asn Cys Thr Asn Gln
Ala Thr Arg Pro Pro Gly
     <210> 43
      <211> 169
      <212> PRT
     <213> Homo sapiens
     <400> 43
Thr Cys Phe Pro Leu Thr Gln Phe Thr Cys Asn Asn Gly Arg Cys Ile
                                  10
Asn Ile Asn Trp Arg Cys Asp Asn Asp Asn Asp Cys Gly Asp Asn Ser
                              25
Asp Glu Ala Gly Cys Ser His Ser Cys Ser Ser Thr Gln Phe Lys Cys
                          40
Asn Ser Gly Arg Cys Ile Pro Glu His Trp Thr Cys Asp Gly Asp Asn
                      55
                                         60
Asp Cys Gly Asp Tyr Ser Asp Glu Thr His Ala Asn Cys Thr Asn Gln
                   70
                                      75
Ala Thr Arg Pro Pro Gly Gly Cys His Thr Asp Glu Phe Gln Cys Arg
                                   90
Leu Asp Gly Leu Cys Ile Pro Leu Arg Trp Arg Cys Asp Gly Asp Thr
           100
                               105
Asp Cys Met Asp Ser Ser Asp Glu Lys Ser Cys Glu Gly Val Thr His
                           120
                                              125
Val Cys Asp Pro Ser Val Lys Phe Gly Cys Lys Asp Ser Ala Arg Cys
                      135
                                          140
Ile Ser Lys Ala Trp Val Cys Asp Gly Asp Asn Asp Cys Glu Asp Asn
                  150
Ser Asp Glu Glu Asn Cys Glu Ser Leu
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<210> 44 <211> 209

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<212> PRT
<213> Homo sapiens
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<213> Homo sapiens

<210> 46 <211> 89 <212> PRT <213> Homo sapiens

Cys His Thr Asp Glu Phe Gln Cys Arg Leu Asp Gly Leu Cys Ile Pro 55 Leu Arg Trp Arg Cys Asp Gly Asp Thr Asp Cys Met Asp Ser Ser Asp 70 Glu Lys Ser Cys Glu Gly Val Thr His 85

<210> 47 <211> 170 <212> PRT <213> Homo sapiens

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<210> 48 <211> 42 <212> PRT <213> Homo sapiens

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<210> 49 <211> 83 <212> PRT <213> Homo sapiens

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<210> 50 <211> 123 <212> PRT <213> Homo sapiens

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Pro Leu Arg Trp Arg Cys Asp Gly Asp Thr Asp Cys Met Asp Ser Ser 20 25 30

Asp Glu Lys Ser Cys Glu Gly Val Thr His Val Cys Asp Pro Ser Val
35 40 45

Lys Phe Gly Cys Lys Asp Ser Ala Arg Cys Ile Ser Lys Ala Trp Val 50 55 60

Cys Asp Gly Asp Asn Asp Cys Glu Asp Asn Ser Asp Glu Glu Asn Cys 65 70 75 80

Glu Ser Leu Ala Cys Arg Pro Pro Ser His Pro Cys Ala Asn Asn Thr
85 90 95

Ser Val Cys Leu Pro Pro Asp Lys Leu Cys Asp Gly Asn Asp Asp Cys
100
105
110

Gly Asp Gly Ser Asp Glu Gly Glu Leu Cys Asp 115 120

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<213> Homo sapiens

<400> 51

<210> 52 <211> 81 <212> PRT <213> Homo sapiens

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      Glu
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      Pro
      Pro
      Ser
      His

      Pro
      Cys
      Ala
      Asn
      Asn
      Thr
      Ser
      Val
      Cys
      Leu
      Pro
      Pro
      Asp
      Lys
      Leu
      Cys

      Asp
      Gly
      Asn
      Asp
      Cys
      Gly
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22135 HOMO Sapiem

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<400> 56
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